

**Work Order ID 129963****\*129963\***

Page 1

February-23-15 10:34:54 AM

Item ID: D3552-11 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Door Prop  
Start Date: 2/23/15 Start Qty: 10.00 **\*10\*** Cust Item ID:  
Required Date: 2/23/15 Req'd Qty: 10.00 **\*10\*** Customer:  
Reference:

Approvals: Process Plan: MLJ Date: 15-02-25 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3552    | K            |

100 0.00

**\*100\***

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 27602  
Purchase Part Number: B8-240-575-150N  
Supplier: LS Technologies ✓  
Certificate of conformity is required

0.00

MLJ 15-02-27 (10)

110

**\*110\***

Packaging

Packaging

Receive &amp; Inspect for Damage &amp; Mat'l Certs

Memo

Ensure certificate of conformity is attached

0.00

0.00

104 SP/15-035

120

**\*120\***

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

Test for correct pressure

0.00

0.00

(10)

DAS  
38  
9-88

MAR 11 2015

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other                                                                                                                                                                                                                                                          |

# Work Order ID 129963

\*129963\*

Page 2

February-23-15 10:34:54 AM

Item ID: D3552-11 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Door Prop  
 Start Date: 2/23/15 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 2/23/15 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

130 Identify as per dwg & Stock Location: 51363 0.00

\*130\*

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release 0.00

\*140\*

QC

Memo

0.00

Quality Control

MLJ 15-03-11

MF  
15-3-10

DAS  
06  
0-00

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
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| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
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| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

February-23-15 10:34:53 AM

**\*1 29963\***

**\*D3552-11\***

**Required Date:** 2/23/15

**Required Qty: 10.00**

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

1

10

**\*\***

## GAS SPRING

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

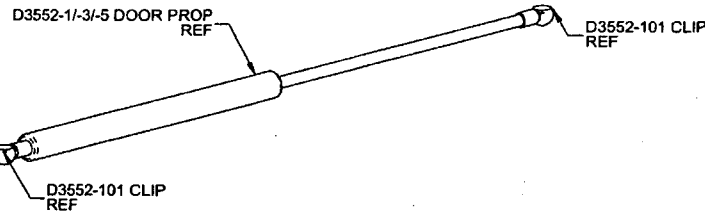
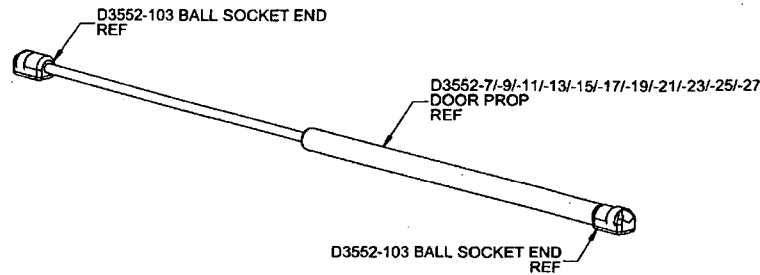
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
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| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other                                                                                                                                                                                                                                                          |

# SPECIFICATION CONTROL DRAWING



SHOP COPY

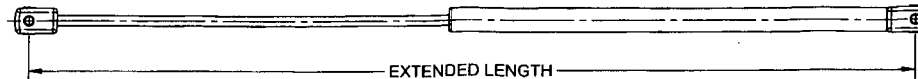
UNCL

SUP

NO 129963 MLS  
1502-25

RELEASED  
2012-07-24

|            |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                          |              |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| K          | ADD "X" TO LS TECHNOLOGIES P/Ns TO DESIGNATE "EXTRA DAMPING" FOR D3552-15/-17/-19/-25/-27. REASON: PART2-208.                                                                                                   | MB                                                                                                                                                                                                                                                                       | 12.07.16     |
| J          | ADD P/N D3552-25/-27. REMOVE ALTERNATE PART NUMBER FOR -15, -17 AND -19. STROKE FOR -15, -17 AND -19 WAS 138/6.06 NOW 154/6.06. EXTENDED LENGTH FOR -15, -17 AND -19 WAS 386/15.2 NOW 387/15.2.                 | AP                                                                                                                                                                                                                                                                       | 11.12.07     |
| I          | ADD P/N D3552-23                                                                                                                                                                                                | RF                                                                                                                                                                                                                                                                       | 11.10.11     |
| H          | ADD P/N D3552-21                                                                                                                                                                                                | DC                                                                                                                                                                                                                                                                       | 11.03.10     |
| G          | FOR -15, FORCE:300/67.4 WAS 400/89.9, SUPPLIER P/N B8-154-387-300N WAS B8-154-387-400N; FOR -17, STROKE: 139/5.47 WAS 150/6.30, EXT LG: 386/15.2 WAS 407/16.0, SUPPLIER P/N B8-154-387-150N WAS B8-167-408-158N | JPH                                                                                                                                                                                                                                                                      | 10.11.01     |
| F          | ADD P/N D3552-15/-17/-19 AND ALTERNATE SUPPLIER                                                                                                                                                                 | JPH                                                                                                                                                                                                                                                                      | 10.07.27     |
| E          | ADD P/N D3552-13 ZN B8-1, A8-1, D6-1, CHANGE NAME FROM "GAS SPRING" TO "DOOR PROP" THROUGH OUT DWG                                                                                                              | HS                                                                                                                                                                                                                                                                       | 10.02.03     |
| D          | ADD P/N D3552-101 ZN D6-1, C7-1, C1-1 AND D3552-103 ZN D1-1 AND C2-1 AND ZN B8-1; ADD NOTE REGARDING D3552-101 AND D3552-103 COMPATIBILITY ZN A8-1                                                              | HS                                                                                                                                                                                                                                                                       | 09.04.02     |
| C          | ADD D3552-11 AND CONVERSIONS FOR INSPECTION; UPDATE P/N FOR D3552-7                                                                                                                                             | LE                                                                                                                                                                                                                                                                       | 07.06.01     |
| B          | ADD D3552-7/-9; UPDATE DESC. D3552-1/-3/-5                                                                                                                                                                      | LE                                                                                                                                                                                                                                                                       | 06.10.24     |
| A          | NEW ISSUE                                                                                                                                                                                                       | LE                                                                                                                                                                                                                                                                       | 06.09.15     |
| REV.       | DESCRIPTION                                                                                                                                                                                                     | BY                                                                                                                                                                                                                                                                       | DATE         |
| DESIGN     | JE                                                                                                                                                                                                              | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                        |              |
| DRAWN      | JE                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                          |              |
| CHECKED    | JE                                                                                                                                                                                                              | DRAWING NO. D3552                                                                                                                                                                                                                                                        | REV. K       |
| MFG. APPR. | JE                                                                                                                                                                                                              | TITLE                                                                                                                                                                                                                                                                    | SHEET 1 OF 2 |
| APPROVED   | JE                                                                                                                                                                                                              | DOOR PROP                                                                                                                                                                                                                                                                | SCALE        |
| DE APPR.   | JE                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                          | NTS          |
| DATE       | 12.07.16                                                                                                                                                                                                        | COPYRIGHT © 2006 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |



| DART PART NUMBER | DESCRIPTION               | STROKE (mm/in) | EXTENDED LENGTH (mm/in) | FORCE (N/lb) | END FITTING            | MATERIAL     | SUPPLIER        | SUPPLIER PART NUMBER OR MODEL NUMBER |
|------------------|---------------------------|----------------|-------------------------|--------------|------------------------|--------------|-----------------|--------------------------------------|
| D3552-1          | DOOR PROP                 | 220/8.66       | 530/20.6                | 70/15.7      | 10mm SS BALL SOCKET    | CARBON STEEL | LS TECHNOLOGIES | C8-220-530-070N                      |
| D3552-3          | DOOR PROP                 | 200/7.87       | 490/19.3                | 200/45.0     | 10mm SS BALL SOCKET    | CARBON STEEL | LS TECHNOLOGIES | C8-200-490-200N                      |
| D3552-5          | DOOR PROP                 | 175/6.89       | 430/16.9                | 150/33.7     | 10mm SS BALL SOCKET    | CARBON STEEL | LS TECHNOLOGIES | C8-175-430-150N                      |
| D3552-7          | DOOR PROP                 | 220/8.66       | 530/20.9                | 70/15.7      | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-220-530-070N                      |
| D3552-9          | DOOR PROP                 | 200/7.87       | 490/19.3                | 200/45.0     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-200-490-200N                      |
| D3552-11         | DOOR PROP                 | 240/9.45       | 575/22.6                | 150/33.7     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-240-575-150N                      |
| D3552-13         | DOOR PROP                 | 220/8.66       | 530/20.9                | 140/31.5     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B6-220-530-140N                      |
| D3552-15         | DOOR PROP W/EXTRA DAMPING | 154/6.06       | 387/15.2                | 300/67.4     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-154-387-300NX                     |
| D3552-17         | DOOR PROP W/EXTRA DAMPING | 154/6.06       | 387/15.2                | 156/35.1     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-154-387-156NX                     |
| D3552-19         | DOOR PROP W/EXTRA DAMPING | 154/6.06       | 387/15.2                | 60/13.5      | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-154-387-060NX                     |
| D3552-21         | DOOR PROP                 | 167/6.57       | 410/16.1                | 70/15.7      | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B6-167-410-070N                      |
| D3552-23         | DOOR PROP                 | 190/7.48       | 475/18.7                | 70/15.7      | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B6-190-475-070N                      |
| D3552-25         | DOOR PROP W/EXTRA DAMPING | 148/5.83       | 475/18.7                | 300/67.4     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-148-475-300NX                     |
| D3552-27         | DOOR PROP W/EXTRA DAMPING | 148/5.83       | 475/18.7                | 156/35.1     | 10mm NYLON BALL SOCKET | CARBON STEEL | LS TECHNOLOGIES | B8-148-475-156NX                     |
| 2 D3552-101      | CLIP                      | N/A            | N/A                     | N/A          | N/A                    | CARBON STEEL | LS TECHNOLOGIES | C9                                   |
| 3 D3552-103      | BALL SOCKET END           | N/A            | N/A                     | N/A          | N/A                    | NYLON        | LS TECHNOLOGIES | B10                                  |

### D3552-X DOOR PROP

**RELEASED**  
2012-07-24

#### NOTES:

- 1) IDENTIFICATION: IDENTIFY PER QSI 044 6.2
- 2) D3552-101 CLIP IS ONLY COMPATIBLE WITH D3552-1/-3/-5 DOOR PROPS
- 3) D3552-103 BALL SOCKET END IS ONLY COMPATIBLE WITH D3552-7/-9/-11/-13/-15/-17/-19/-21/-23/-25/-27 DOOR PROPS

|            |          |                                                                                                                                                                                                                                                                                                |              |
|------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DE       | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                      |              |
| DRAWN      | DE       | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                                    |              |
| CHECKED    | AP       | DRAWING NO. D3552                                                                                                                                                                                                                                                                              | REV. K       |
| MFG. APPR. | AP       |                                                                                                                                                                                                                                                                                                | SHEET 2 OF 2 |
| APPROVED   | AP       | TITLE                                                                                                                                                                                                                                                                                          | SCALE        |
| DE APPR.   | AP       | <b>DOOR PROP</b>                                                                                                                                                                                                                                                                               | NTS          |
| DATE       | 12.07.16 | <small>COPYRIGHT © 2006 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPILED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |              |





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO27602

Purchase Order Date 2/27/2015

PO Print Date 2/27/2015

Page Number 1 of 2

**Order From :**

VC-LST0001

**Ship To :** DART AEROSPACE LTD

LS TECHNOLOGIES INC.  
314 JESSOP AVE  
SASKATOON, SK S7N 1Y6  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 306 683 5000

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #** 10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

EXW - (Ex Works)

**Ship To Contact**

**Ship To Phone**

**Ship Via:** FedEx Overnight collect

**Ship Acct:**

| Line Nbr    | Reference Vendor Part Number<br>Line Comments<br>Delivery Comments | Description/<br>Mfg ID | Req Date/<br>Taxable<br>Promise Date | CD | Req Qty/<br>Unit of<br>Measure | PO Unit Price | Extended Price |
|-------------|--------------------------------------------------------------------|------------------------|--------------------------------------|----|--------------------------------|---------------|----------------|
| 1           | B8-240-575-150N<br><br>AS PER DWG.D3552 REV.K<br>B129963           | GAS SPRING             | 3/5/2015<br>Yes<br>3/5/2015          |    | 10.00<br>Each                  | \$41.36       | \$413.64       |
| Line Total: |                                                                    |                        |                                      |    |                                |               | \$413.64       |
| 2           | SSA4/6-122-315-310N<br><br>AS PER DWG.D3969 REV.C<br>B129893       | Gas Spring             | 3/5/2015<br>Yes<br>3/5/2015          |    | 4.00<br>Each                   | \$65.00       | \$260.00       |
| Line Total: |                                                                    |                        |                                      |    |                                |               | \$260.00       |

**PO Instructions:** Fedex Acc#151793240

**Note:**

2/27/2015

LS Technologies Inc  
314 Jessop Ave  
Saskatoon, SK S7N 1Y6

Ph: 306-683-5000 Fax: 306-683-6403

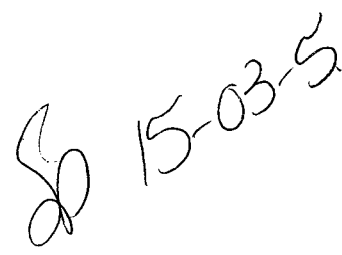
# Packing Slip

| P.O. No. | Date      | Invoice # |
|----------|-----------|-----------|
| PO27602  | 3/03/2015 | 12975     |

|                                                                   |
|-------------------------------------------------------------------|
| Bill to:                                                          |
| Dart Aerospace Ltd<br>1270 Aberdeen St.<br>Hawkesbury, ON K6A 1K7 |

|                                                                                                   |
|---------------------------------------------------------------------------------------------------|
| Ship to:                                                                                          |
| Main Finished Goods Location<br>Dart Aerospace Ltd<br>1270 Aberdeen St.<br>Hawkesbury, ON K6A 1K7 |

| Ship      | Via    | FOB |
|-----------|--------|-----|
| 3/03/2015 | Fed-Ex |     |

| Qty     | Description                                                                                                                                                                                                                                                                                   |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10<br>4 | D3552-11 B129963 Gas spring<br>D3969-1 B129893 Stainless Gas Spring ( SSA4/6-122-315-310N )<br>LABEL WITH PERMANT INK MARKER ONLY - NO LABELS<br><br>Shipping Via FED EX Tracking # 773033367417<br><br> |

|                    |
|--------------------|
| Order checked by : |
|--------------------|



LS Technologies Inc  
314 Jessop Ave  
Saskatoon, SK, S7N 1Y6  
Ph: (306) 683-5000 Fax: (306) 683-6403

**Certificate of Compliance**

March 3, 2015

**Certificate of Compliance**

This is to certify that the parts listed below meets specifications as required by your order.

10 Units: D3552-11 B129963 Gas Spring

4 Units: D3969-1 B129893 Gas Spring

Country of Manufacture: Canada  
Date of Manufacture : March 2015  
This product is ROHS compliant.

Purchase Order # 27602  
Invoice # 12975

*SP15-02-3*

L S Technologies Inc Canada

---

Nolan Fehr  
Manager